ABSTRACT

A semiconductor substrate cutting method which can efficiently cut a semiconductor substrate having a front face formed with a functional device together with a die bonding resin layer is provided.

A wafer 11 having a front face 3 formed with a functional device 15 is irradiated with laser light L while positioning a light-converging point P within the wafer 11 with the rear face 17 of the wafer 11 acting as a laser light incident face, so as to generate multiphoton absorption, thereby forming a starting point region for cutting 8 due to a molten processed region 13 within the wafer 11 along a line along which the substrate should be cut 5. Consequently, a fracture can be generated from the starting point region for cutting 8 naturally or with a relatively small force, so as to reach the front face 3 and rear face 17. Therefore, when an expansion film 21 is attached to the rear face 17 of the wafer 11 by way of a die bonding resin layer 23 after forming the starting point region for cutting 8 and then expanded, the wafer 11 and die bonding resin layer 23 can be cut along the line along which the substrate should be cut 5.